AMENDMENTS TO THE CLAIMS

Claim 1. (Currently Amended) : In an multi-protocol label switching system (MPLS) having a working path over which data is carried from a source to a destination and further having a protection path over which data from ~~said~~ the source to ~~said~~ the destination can be carried, a method of initiating an MPLS protection path switch over from ~~said~~ the working path to ~~said~~ the protection path comprising ~~the steps of~~:

a. detecting a failure on ~~said~~ the working path;

b. transmitting a failure notification message from ~~said~~ only a first switching node to at least a second, switching node of ~~said~~ the working path;

c. routing data from ~~said~~ the working path to ~~said~~ the protection path upon the receipt of ~~said~~ the failure notification message at at least one of: ~~said~~ the second switching node and a third switching node of ~~said~~ the working path.

Claim 2. (Original) : The method of Claim 1 further including the step of re-routing data from ~~said~~ the protection path to ~~said~~ the working path upon the determination that ~~said~~ the failure on ~~said~~ the working path has been corrected.

Claim 3. (Original) : The method of Claim 1 wherein ~~said~~ the failure notification message travels along a path through ~~said~~ the MPLS system, extending between ~~said~~ the destination and ~~said~~ the source.

Claim 4. (Currently Amended) : A multi-protocol label switching (MPLS) system protection switch~~,~~ ~~said MPLS switch comprised of~~ comprising:

a first data input port into which MPLS data is received from a data source;

a first data output port from which MPLS data is sent to a second MPLS switching system comprising an MPLS working path;

a second data output port from which MPLS data is sent to a third MPLS switching system comprising an MPLS protection path; and

a second data input port adapted to connect to a path that follows the MPLS working path for receiving failure notifications;

whereby data received at ~~said~~ the data input port from ~~said~~ the data source can be selectively

routed from ~~said~~ the second MPLS switching system to ~~said~~ the third MPLS switching system.

Claim 5. (Original) : The MPLS switching system of Claim 4 further comprising a control input port

protection path failure messages are received from at least one ~~said~~ of the second MPLS switching system

and ~~said~~ the third MPLS switching system.

Claim 6. (Currently Amended) : A multi-protocol label switching (MPLS) system comprised of:

a first MPLS protection switch having a data input port into which MPLS data is received from a

data source;

a second MPLS switching system coupled to ~~said~~ the first MPLS protection switch via a first data

path carrying MPLS data, ~~said~~ the first data path comprising an MPLS working path;

a third MPLS switching system coupled to ~~said~~ the first MPLS protection switch via a second

data path capable of carrying MPLS data, ~~said~~ the second data path comprising an MPLS protection path;

an upstream reverse notification tree (RNT) data path extending at least between ~~said~~ the second

MPLS switching system to ~~said~~ the MPLS protection switch carrying data by which a switchover from a

working path to a protection path can be initiated.

Claim 7. (New) : The method of Claim 1, wherein the first switching node is upstream to the failure.

Claim 8. (New) : The method of Claim 1, wherein the failure is an uplink failure and is detected by a

node upstream to the failure.

Claim 9. (New) : The method of Claim 1, wherein the failure is a downlink failure and is detected by a

node downlink to the failure.

Claim 10. (New) : The method of Claim 1, wherein the failure is a bi-directional failure and is detected

by a pair of nodes downlink and uplink to the failure.

Claim 11. (New) : The method of Claim 1, wherein the failure is a node failure and is detected by a pair

of nodes downlink and uplink to the failure.

Claim 12. (New) : A method for MPLS protection switching from a working path to a protection path

comprising:

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transmitting a failure notification to a protection switch node along a path that follows the

working path; and

routing data at the protection switch node from the working path to the protection path upon

receipt of the failure notification.

Claim 13. (New) : The method of Claim 12, wherein the failure notification is transmitted in a direction

reverse to the working path.

Claim 14. (New) : The method of Claim 12, wherein the path that follows the working path mirrors the

working path.

Claim 15. (New) : The method of Claim 12, further comprising detecting a failure.

Claim 16. (New) : The method of Claim 12, wherein the failure notification is transmitted by a node

upstream to the failure.

Claim 17. (New) : The method of Claim 15, wherein the failure is an uplink failure and is detected by a

node upstream to the failure.

Claim 18. (New) : The method of Claim 15, wherein the failure is a downlink failure and is detected by

a node downlink to the failure.

Claim 19. (New) : The method of Claim 15, wherein the failure is a bi-directional failure and is detected

by a pair of nodes downlink and uplink to the failure.

Claim 20. (New) : The method of Claim 15, wherein the failure is a node failure and is detected by a pair

of nodes downlink and uplink to the failure.